## ISSUE SLIP STAPLE AREA (for additional cross references)

| POSITION                  | INITIALS | ID NO. | DATE |
|---------------------------|----------|--------|------|
| FEE DETERMINATION         |          |        |      |
| O.I.P.E. CLASSIFIER       |          |        |      |
| FORMALITY REVIEW          |          |        |      |
| RESPONSE FORMALITY REVIEW |          |        |      |

## **INDEX OF CLAIMS**

| ~ | Rejected                   | N   | Non-elected  |
|---|----------------------------|-----|--------------|
| = | Allowed                    | - 1 | Interference |
| _ | (Through numeral) Canceled | Α   | Appeal       |
| ÷ | Restricted                 | 0   | Objected     |

|           |                      | į  |              |               |  | ÷  |          | •••••          | ••••     | ••••         |              | •            |  |  |
|-----------|----------------------|--|--------------|---------------|--|--|----------|----------------|----------|--------------|--------------|--------------|--|--|
| <u></u>   | Claim                |  |              |               |  |  | Date     |                |          |              |              |              |  |  |
| Cla       | im                   | -81  |              | _             |  | Dat  | e        |                |          |              | -            |              |  |  |
|           | ginal                | 6.8.0  | 3-18-47      |               |  |  |          | ı              |          |              |              |              |  |  |
| la        | įĝ                   | á  | 3/-          |               |  |  |          |                |          |              | 1            |              |  |  |
| 1         | Ŕ                    | ٦,   | 3            |               |  |  |          |                | _        |              |              |              |  |  |
|           | 7                    | ₽.   | 7            |               |  |  |          |                |          |              |              |              |  |  |
| Ш         | 2                    | V  |              |               |  |  |          |                |          |              |              |              |  |  |
|           | 3                    | ν,   | >            |               |  |  |          |                |          |              |              |              |  |  |
|           | 4                    | Z  | ٦,           |               |  |  |          |                |          |              |              | l            |  |  |
|           | 5                    | V,   | 7            |               |  |  |          |                |          |              |              |              |  |  |
|           | 6                    | $\nabla_{\mathbf{f}}$                            | 7            |               |  |  |          |                |          |              |              |              |  |  |
|           | 7                    | Ч  | 7            |               |  |  |          |                |          |              |              | l            |  |  |
|           | 8                    | V,   | 7            |               |  |  |          |                |          |              |              | l            |  |  |
|           | 9                    | lacksquare                                       | J            |               |  |  |          |                |          | _            |              | 1            |  |  |
| П         | 10                   | V  | J            | $\overline{}$ | <del>                                     </del> |  |          |                |          |              |              | ĺ            |  |  |
|           | 11                   | 7  | J            |               | -  |  | T        | $\vdash$       | Г        |              | -            | ľ            |  |  |
| $\vdash$  | 12                   | J  | J            | $\vdash$      | $\vdash$   | ┢  | Ι-       |                |          | -            |              | ١            |  |  |
| -         | 13                   | Ź  | J            | -             | _  | -  | 1        |                | 广        |              |              | 1            |  |  |
|           | 14                   | V  | J            | H             | -  | <del>                                     </del> | t        |                | $\vdash$ |              |              | 1            |  |  |
| -         | 15                   | 1  | J            | <del> </del>  | $\vdash$   | $\vdash$   | -        | $\vdash$       | -        | -            | -            | ł            |  |  |
| $\vdash$  | 16                   | 5  | Ĵ            | ⊢             |  | ┝  | ├        | ┢              | -        |              | -            | ł            |  |  |
| -         | 17                   | Ü  | 1            | $\vdash$      | $\vdash$   | $\vdash$   | ⊢        | ├-             | -        | ŀ-           | ├            | ł            |  |  |
| Š         | _                    | 5  | · ·          | ⊢             |  | <del> </del>                                     | ⊢        | ⊢              | $\vdash$ | H            | $\vdash$     | ł            |  |  |
| _         | 18                   | 14   | Ĕ            | _             |  | ╙  | ┡        | <del> </del> _ | <u> </u> | <u> </u>     | <u> </u>     | ļ            |  |  |
| <u>y_</u> | 19                   | K  | 14           | <u> </u>      | L  | <u> </u>   | <u> </u> | ļ              | _        | _            | L            | l            |  |  |
|           | 20                   | <u> </u>   | 7            | l             |  | _  |          |                |          |              |              |              |  |  |
|           | 21                   | V  | J            |               |  |  |          | Ľ.             |          | ,            |              |              |  |  |
| Г         | 22                   | V  | J            |               | -  | ·  |          |                |          |              |              | 1            |  |  |
| Г         | 23                   | J  | J            | Г             | П  | П  | Π        | Γ              | l -      |              |              | 1            |  |  |
|           | 24                   | V  | V            |               |  |  |          |                | Г        |              |              | 1            |  |  |
|           | 25                   | J  | リ            |               | Г  | Г  |          |                |          |              |              | 1            |  |  |
|           | 26                   |  |              |               |  |  | T        | Г              |          |              | Г            | 1            |  |  |
|           | 26<br>27             |  | $\vdash$     | $\vdash$      | Ι-   | Н  | t        | $\vdash$       | Н        | Т            | ┰            | 1            |  |  |
|           | 28                   | <del>                                     </del> | $\vdash$     |               | Т  | Н  | t        |                | Т        | ┢            | _            | 1            |  |  |
|           | <b>才</b><br>33<br>32 |  | ┢            | -             | 1  | <del>                                     </del> | ┢        | H              |          |              | _            | 1            |  |  |
| _         | 30                   |  | ┢            | -             | ┢  | ┢  | $\vdash$ | -              | $\vdash$ | $\vdash$     | $\vdash$     | 1            |  |  |
| _         | 31                   | ⊢  | ┢            | -             | ╫  | ├-   | ╁        | ⊢              | -        | ⊢            | ┢            | ł            |  |  |
| -         | 32                   | ⊢  | ┝            | $\vdash$      | ┢  | ⊢  | ├        | ├              | ├        | ┢            | ├─           | ł            |  |  |
| _         | 33                   | ┢  | ⊢            | ⊢             | ⊢  | ⊢  | ┢        | ┢              | ⊢        | ⊢            | ├─           | ł            |  |  |
| $\vdash$  | 34                   | ├  | -            | -             | ├  | ├-   | ╁        | $\vdash$       | -        |              | ├-           | ł            |  |  |
|           | -                    | ⊢  | <b>!</b>     | -             | ├  | ⊢  | ├        |                | ⊢        | ⊢            |              | ł            |  |  |
| <b>—</b>  | 35                   | -  | ╙            | <u> </u>      | ├-   | -  | ⊢        | -              | ├-       | -            | ├            | ł            |  |  |
| <u></u>   | 36                   | $\vdash$   | <b> </b> -   | <u> </u>      | <u> </u>   | <u> </u>   | ļ        | -              | <b>—</b> | <u> </u>     | <del> </del> | ł            |  |  |
| <u></u>   | 37                   | <del> </del> _                                   | <b> </b>     |               | <b> </b> _                                       | $\vdash$   | ļ        | <del> </del>   | <b>—</b> | $\vdash$     | ⊢            | 1            |  |  |
| <u>_</u>  | 38                   | L  | <u> </u>     | _             | L  | _  | $\vdash$ | <b> </b>       |          | $oxed{oxed}$ | <u> </u>     | I            |  |  |
|           | 39                   | $oldsymbol{oldsymbol{oldsymbol{eta}}}$           | <u> </u>     | _             | <u> </u>   | <u> </u>   | <u> </u> | <u> </u>       | <u> </u> | <u>_</u>     | $\vdash$     | 1            |  |  |
| L         | 40                   | L  |              |               | L  | L  | L        | L              | L        | L            | L            | 1            |  |  |
|           | 41                   | Γ  |              | _             | Γ  |  | [_       |                |          | Γ            | Γ            | 1            |  |  |
|           | 42                   | Γ  | Π            | Γ             | Г  | Ī  | Γ        | Γ              | Π        | Π            | П            | 1            |  |  |
|           | 43                   | 1  |              | Г             | T  | <u> </u>   | Ι        | 1              | П        | Τ            | 1            | 1            |  |  |
| $\vdash$  | 44                   | -  | T            | $\vdash$      | t  | t  | $\vdash$ | $t^-$          |          | T            | ✝            | 1            |  |  |
| $\vdash$  | 45                   | _  | $\vdash$     | -             | $\vdash$   | $\vdash$   | 1        | ╁              | $\vdash$ | $\vdash$     | $\vdash$     | l            |  |  |
| -         | 46                   | ┿  | 1            | $\vdash$      | +  | <del>                                     </del> | ╁        | ╁              | ┢        | $\vdash$     | $\vdash$     | ł            |  |  |
| $\vdash$  | 47                   |  | ┼            | $\vdash$      | 1  | ┼-   | ╂        | ┨              | $\vdash$ | ┢            | $\vdash$     | 1            |  |  |
|           |                      | L  | ⊢            | $\vdash$      | -  |  | ⊢        | -              | 1        | ├            | -            | $\mathbf{I}$ |  |  |
| -         | 48                   | -  | 1            | 1—            | $\vdash$   | <del>  -</del>                                   |          | 1              | ₩        | $\vdash$     |              | 1            |  |  |
| -         | 49                   |  | <del> </del> | <u> </u>      | $\vdash$   | $\vdash$   | ╄        |                | ⊢        | $\vdash$     | ⊢            | ١            |  |  |
| L_        | 50                   | <u>L</u>   |              |               | 1  | 1_   | 1        | 1              | 1        | 1_           | 1            | 1            |  |  |

| Cla      | im       |          |                  |              |              | Dat      |  |              |         |          |          |
|----------|----------|----------|------------------|--------------|--------------|----------|--|--------------|---------|----------|----------|
|          |          | 1        |                  |              |              |          |  |              |         |          | _        |
| Final    | Original |          |                  |              |              |          |  |              |         |          |          |
| П        | 51       |          |                  |              |              |          |  |              |         |          |          |
|          | 52       |          |                  |              |              |          |  |              |         |          |          |
|          | 53       |          |                  |              |              |          |  |              |         |          |          |
|          | 54       |          |                  |              |              |          |  |              |         |          |          |
|          | 55       |          |                  |              |              |          |  |              |         |          |          |
|          | 56       |          |                  |              |              |          |  |              |         |          | _        |
| L        | 57       |          | _                |              |              |          |  | _            |         |          | _        |
| ╙        | 58       | Щ        |                  |              |              |          |  |              | L_      | _        | _        |
| _        | 59       | Ш        |                  |              |              |          | _  | <u> </u>     |         | L        | _        |
| $\vdash$ | 60<br>61 | Н        | _                |              |              |          |  |              |         |          | _        |
| -        | 62       | Н        | _                |              |              |          | _  | ├            | -       | <u> </u> | _        |
| -        | 63       |          |                  | -            | -            |          | -  |              | -       | -        | H        |
| -        | 64       |          | _                | -            | -            | -        | -  | ├            | -       | -        | -        |
| -        | 65       |          | _                | -            | -            | -        |  | $\vdash$     | -       | -        | _        |
| H        | 66       | -        | <u> </u>         | <del> </del> | -            | -        | -  |              | -       | -        | -        |
| -        | 67       | -        |                  |              | Η-           |          | -  |              | -       | <u> </u> | -        |
| -        | 68       |          | _                | -            | -            | _        | -  | -            | -       |          | -        |
| <b> </b> | 69       | -        | _                | Ι            | ┢            |          | <del>                                     </del> | -            | _       | -        |          |
|          | 70       | _        | -                | H            |              |          | $\vdash$   | ı            |         | $\vdash$ |          |
| $\vdash$ | 71       | -        | _                |              | Н            |          | $\vdash$   | $\vdash$     |         | $\vdash$ | $\vdash$ |
| $\vdash$ | 72       | _        |                  | $\vdash$     | ┪            | $\vdash$ | $\vdash$   | $\vdash$     |         | $\vdash$ | _        |
|          | 73       |          |                  |              | Т            |          | Τ,   | $\vdash$     |         |          |          |
|          | 74       |          |                  |              | Ī            |          |  | $\vdash$     |         |          |          |
|          | 75       |          |                  |              |              |          |  |              |         |          |          |
|          | 76       |          |                  |              |              |          |  |              |         |          |          |
|          | 77       |          |                  |              |              |          |  |              |         |          |          |
|          | 78       |          |                  | Ш.           | L_           |          | L  |              |         |          |          |
| $\perp$  | 79       |          |                  |              | L_           | Ш        |  | _            | Ш       | L        |          |
| <u></u>  | 80       | Щ        |                  | <u> </u>     | <u> </u>     | <u> </u> | <u> </u>   |              | _       | $\vdash$ | L        |
| <u> </u> | 81       |          |                  | <u> </u>     | _            | <u> </u> | ļ  | <u> </u>     | -       | <u> </u> | _        |
| <u> </u> | 82<br>83 |          | _                | ┡            | ⊢            | L        | $\vdash$   |              | _       | _        | _        |
| -        | 84       | _        |                  | <u> </u>     | _            | ⊢        | <u> </u>   | <del> </del> | _       | _        | -        |
| -        | 85       |          | _                | ├            | ⊢            | $\vdash$ | ├  | <del> </del> | -       | _        | H        |
| $\vdash$ | 86       |          |                  | ┝            | -            | -        |  | $\vdash$     | H       | $\vdash$ | -        |
| -        | 87       | H        |                  | $\vdash$     | <del> </del> | -        | Ι  | $\vdash$     | H       | $\vdash$ | $\vdash$ |
| H        | 88       | Н        |                  | $\vdash$     | $\vdash$     | -        | $\vdash$   | <u></u>      |         | $\vdash$ | $\vdash$ |
|          | 89       |          |                  | Ι-           | $\vdash$     | $\vdash$ | _  |              |         | _        | $\vdash$ |
|          | 90       | Г        |                  |              | Γ            |          |  | Γ-           | Г       | Γ        | Γ        |
|          | 91       | _        | _                | $\vdash$     |              |          | -  | T            | Г       | _        | Г        |
| $\vdash$ | 92       | $\vdash$ |                  | Г            | Г            | Г        | Г  | ┢            | Г       | Т        | Г        |
| $\vdash$ | 93       | П        |                  | Γ            |              | Г        |  |              |         |          |          |
|          | 94       |          |                  | Γ            |              |          |  |              |         |          |          |
|          | 95       |          |                  |              |              |          |  |              |         |          |          |
|          | 96       |          |                  |              |              |          |  | Ĺ            |         |          |          |
|          | 97       |          |                  |              |              |          |  |              | Ĺ       |          |          |
|          | 98       |          |                  |              |              |          |  |              | L       | _        | L.       |
| L        | 99       |          | $\mathbb{L}_{-}$ | L            | _            | L        |  |              | <u></u> |          | L        |

| Claim Date |            |          |          |          |               |  |          |                                     |          |          |          |
|------------|------------|----------|----------|----------|---------------|--|----------|-------------------------------------|----------|----------|----------|
| Cla        | im         | <u> </u> | _        |          |               | Dat  | e        |                                     |          |          |          |
| Final      | Original   |          |          |          |               |  |          |                                     |          |          |          |
|            | 101        |          |          |          | $\overline{}$ | ┢  |          |                                     |          |          | -        |
| _          | 102        |          |          | _        | Г             | _  |          | $\vdash$                            |          |          | -        |
|            | 103        |          | П        |          |               | ┢  |          | Н                                   | _        | $\vdash$ | -        |
| _          | 104        |          |          |          |               | $\vdash$   | $\vdash$ |                                     | _        | Н        |          |
|            | 105        |          |          |          |               |  | $\vdash$ |                                     |          | ┌        |          |
|            | 106        |          |          |          |               |  |          |                                     |          | -        | -        |
|            | 107        |          |          |          |               |  |          |                                     |          |          | Г        |
|            | 108        | _        |          |          |               |  |          |                                     |          |          |          |
|            | 109        | _        |          |          |               |  |          |                                     |          |          |          |
|            | 110        |          |          |          | L             |  |          | ***                                 |          |          | L        |
|            | 111        | _        |          |          |               | L  | <u></u>  |                                     |          |          | L        |
|            | 112        | L        |          |          |               | L  | <u>L</u> |                                     | L        | L        | L        |
|            | 113        |          |          |          |               |  | _        |                                     | L_       | L        | L        |
|            | 114        |          | <u> </u> | Ш        |               |  | _        |                                     |          | _        | L        |
|            | 115        | _        | _        | L        |               |  | L        | L                                   |          | L        | L        |
|            | 116        |          | _        | <u> </u> | L.            | L.   | <u> </u> | $ldsymbol{ldsymbol{ldsymbol{eta}}}$ | _        | L        | L        |
| _          | 117        |          | _        | _        |               |  | <u> </u> | L                                   | Ь.       | L        | L        |
|            | 118        |          | <u> </u> |          | ļ             | L  | <u> </u> | <u> </u>                            | <u> </u> | <u> </u> | L        |
|            | 119        |          |          |          | _             | L  | <u> </u> | ldash                               | <u> </u> | <u> </u> | L.       |
|            | 120        |          | L        |          | <u> </u>      | _  |          | L                                   |          | L        | L        |
|            | 121        |          |          |          | ļ             | ļ  | <u> </u> |                                     |          |          | L        |
|            | 122        |          | Ш        |          | ļ             | <u> </u>   | _        |                                     |          | L        | _        |
|            | 123        |          |          |          | <u> </u>      | <u> </u>   | _        |                                     |          | _        | L        |
| _          | 124        |          |          |          | <u> </u>      | <u> </u>   | $\vdash$ |                                     |          | _        | <u> </u> |
|            | 125        | _        | -        |          |               | <u> </u>   | _        | _                                   | -        | _        | _        |
|            | 126        | <u> </u> |          | _        |               |  |          | $\vdash$                            |          | _        | <u> </u> |
|            | 127<br>128 |          | -        | _        | <del> </del>  | <u> </u>   | -        | _                                   |          | _        | ⊢        |
|            | 129        | -        |          | _        | -             | <del> </del>                                     |          | -                                   |          | H        | H        |
|            | 130        | -        | -        | _        | -             | ┝  | -        | ⊢                                   | _        | -        | ┝        |
| _          | 131        | -        |          |          | -             | -  | Н        | Н                                   |          | -        | ├        |
| _          | 132        | H        |          |          | $\vdash$      | $\vdash$   |          | -                                   |          | -        | -        |
| _          | 133        |          |          | H        | $\vdash$      | <del>                                     </del> | _        |                                     | -        | _        | -        |
| _          | 134        |          |          | _        | ┝             | -  | -        |                                     | Н        | _        |          |
|            | 135        |          | Н        | _        | ┢             |  | _        | Н                                   |          | -        | _        |
|            | 136        |          |          |          | $\vdash$      | $\vdash$   |          |                                     | _        |          |          |
| _          | 137        | М        |          | _        | _             |  |          |                                     |          |          |          |
| _          | 138        | П        |          |          |               |  |          |                                     |          |          | -        |
|            | 139        |          |          |          | _             |  |          |                                     |          |          |          |
| _          | 140        |          |          |          |               |  |          |                                     |          |          |          |
|            | 141        |          |          |          | Ι.,           |  |          |                                     |          |          |          |
| _          | 142        | I        |          | $\neg$   | _             |  |          |                                     |          |          |          |
|            | 143        | П        |          |          |               | П  | _        |                                     |          |          |          |
| _          | 144        |          |          |          | _             | Г  |          |                                     |          |          |          |
|            | 145        | П        | П        | Н        | Т             |  |          | $\neg$                              |          |          |          |
|            | 146        | Г        |          |          |               |  |          |                                     |          |          |          |
|            | 147        |          |          |          |               |  |          |                                     |          |          |          |
|            | 148        |          |          |          |               |  |          |                                     |          |          |          |
|            | 149        |          |          |          |               |  |          |                                     |          |          |          |
|            | 150        |          | Г        | _        | T             |  |          |                                     |          |          |          |

If more than 150 claims or 10 actions staple additional sheet here

BEST AVAILABLE COPY